

Mont Ventoux and the Dentelles de Montmirail 1968-1971

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For the past five years my work as an agricultural entomologist has taken me to southern France for the months March to October. Three of these visits were spent investigating various pest problems in the Carpentras region of Vaucluse. This area is the centre of fruit and vegetable production in southern France. All orders of insects were exceptionally abundant and hardly a day passed when I wasn't busy with a net and camera at some time or other.

In his account of the Trans Alpine Insect Safari 1970, Thomson (1970) briefly mentioned his visit to Mont Ventoux. This account prompted me to write up some of my collecting experiences on Ventoux and in the surrounding area.

My favourite insects are the Rhopalocera to which I devoted the majority of my spare time, and I will restrict my account mainly to this group. However, like many other entomologists, I could not help but stray into the studies of other insect groups.

To the east of Carpentras lies Mont Ventoux, a mountain of 6273 ft. (1912 m) which rises abruptly from the Vaucluse Plateau, the broad Rhone Valley and Carpentras Plain. Ventoux lies on the extreme western edge of the Basses Alps and it was on and around this mountain that I concentrated my collecting and observing.

No-one can claim to know Provence if he has not looked down on it from the summit of Mont Ventoux. The panorama is superb especially on a clear day when it extends over a quarter of France. If one is lucky one can see the Italian Frontier (Alpes Maritimes, Dauphine, Savoie) to the Cevennes, the Lyonnais Mountains and the Pyrenees.

The vegetation ranges from typical mediterranean plants on the lower slopes to alpine flowers at the summit. On the flanks of the mountain are forests, the dominant trees of which are the Green Oak (*Quercus ilex* L) and the White Oak *Quercus lanuginosa* Lamk. Scots Pine Cedar, Beech, Firs and Larch occur up to 5250 ft.

My favourite collecting grounds were the grassy slopes just above the "Massif des Cedres" forest on the south facing side of the mountain. Here, the alpine insect species could be found together with many of the low altitude species.

The summit of the mountain is covered with limestone shale and from a distance the mountain appears to be capped with snow because of the reflection of the sun from the white stones.

The average difference in temperature between the summit and the plain is 12 degrees C. The annual rainfall at the summit is double that of the plain. Between December and the end of April snow is always present above 4250 ft,

The N 573 road ascends from Bedoin, 1017 ft., to the sum-

mit 6273 ft., in 14 miles and is well known throughout the western world for its arduous testing of cyclists in the Tour de France. It was here that the British cyclist, Simpson died in 1967.

In 1968 I made my headquarters in a delightful little hotel, the Auberge du Beffroi, in the village of Caromb. This hotel, recommended by a friend, turned out to be far beyond expectations for atmosphere, comfort and cuisine.

After my marriage in 1969, I decided to change from hotel accommodation to a private house. I moved my base to Gigondas, a mediaeval village situated on the western edge of the Dentelles de Montmirail, a range of jagged peaks which are the western extremities of Mont Ventoux. It was here that I spent the 1969 and 1970 seasons, living in a "Gite de France" or holiday house, overlooking the plain of the Ouvèze River and backed by the pine forests of the Dentelles.

Being resident in the area from March until October enabled me to observe and record much of the sequence of biological events during the majority of the insect season.

The earliest event of interest was the appearance of *Melitaea cinxia* L larvae. These could be found feeding on plantains on the first sunny days of the year, sometimes even before the earliest butterflies were on the wing. I can only assume that this species overwinters in the larval stages. On a quick visit to Gigondas in March 1971, I found the ground swarming with these full-grown larvae while temperatures were still cool and only a week after snow had fallen. This was despite the exceptionally cold winter and heavy snow so unusual for Provence.

Even in years when winter continued later than usual, e.g. 1970 and 1971, several species of butterfly could be seen on the wing on the Carpentras Plain and lower slopes of Ventoux during the last week of March. *Vanessa Cardui* L. and *Pieris brassicae* L. were usually the first, followed by the brimstones *Gonopteryx cleopatra* L. and *G. rhamnii* L.

In April the Southern Comma *Polygonia agea* Cr. could also be seen basking on old stone walls where the heat of the sunlight was trapped. This comma, unlike *P. c-album* L. appears to be an insect of the villages. I have found it common in both Gigondas and Caromb but have never seen it in open country. This observation has also been noted by Birkett (1964). *Aglais urticae* L. could also be seen on road surfaces, which retain the warmth of the sun until early evening and are therefore attractive to this species during the spring.

The orange tips *Anthocaris cardamines* L. and *A. belia euphenoides* Stgr. also appeared during early April.

By mid April many more species had appeared and from this time until October, butterflies were abundant everywhere.

On one occasion I witnessed a butterfly migration in the area. This was at Sarrians on the 22nd and 23rd April 1970 when *V. cardui* L. were migrating in a north-easterly direction. The weather was sunny and hot, 27°C. with little or no wind. Flight was extremely rapid and at about 6 ft. above the

ground. A *cardui* passed me every 15 seconds and they would be traversing the road on average 5 yards apart.

These migrating *cardui* were difficult to net because of their speed and contrasted greatly with the occasional individual of the same species feeding on a flower. Perhaps the latter were of the local population and the migrating individuals were from Spain or even Africa. When caught, a migrating *cardui* would, on its release, fly off rapidly in the same NE direction. Unfortunately the migration was arrested by the Mistral, a very strong wind characteristic of the Rhone Valley, and no insects were flying for two days. After this time the migration had apparently passed.

Each year at about the end of April, fully developed larvae of the Garden Tiger Moth *Arctia caja* L. were often to be seen scurrying across the roads. Many hundreds must be killed when they "run the gauntlet" of traffic on a well-used road. This mortality can have little effect on the population which is sometimes so large that they become pests of many of the vegetable crops and vines grown in the area. Occasionally larvae of *Pharagmatobia caesarea* Goetz. could also be found on the roads but these were much less common.

Another victim of the roads was *Brintesia circe* Fab. In this instance it was adult butterflies which suffered because of their size. Smaller butterflies were swept aside unharmed by a passing car but I counted as many as thirty *circe* killed on a journey of twenty miles when driving at 50 mph. When multiplied by the number of vehicles the figure for total killed must be very high, but again this mortality appears to have little effect on the huge population.

Even in early May the snow had only just retreated from the higher slopes of Ventoux. The alpine pastures and rocky terrain above the forest line were still barren and brown. In June, *Parnassius apollo* L. were flying well and larvae could be found feeding on *Sedum*. This race ssp. *venaissimus* Frhst. is large and the ocelli vivid red, but specimens with orange ocelli and sometimes lacking one ocellus can occasionally be taken. This attractive butterfly could also be seen soaring and gliding on the steep slopes of the "Gorges de la Nesque," a most magnificent deep river valley reminiscent of the Cheddar Gorge in Somerset, but much more spectacular. These gorges are only ten miles from Ventoux and well worth a visit.

Mont Ventoux was at its best in late June and early July. Hundreds of flowers decorated the ground and some of the typically high altitude butterflies were to be seen. eg. *Parnassius apollo* L., *Papilio alexanor* Esp., *Melitaea diamina* Lang., *Erebia* spp., *Hipparchia alcyone* Schiff., *Satyrus actaea* Esp., *Satyrus ferula* Fab., *Minois dryas* Scop., *Heodes acciphron gordius* Sulz., *Coenonympha arcania darwiniana* Stdg.

At the end of July when conditions were very dry, Lycaenidae were attracted to moisture and on one occasion in 1969 in the Gorges de la Nesque, *Lycaena coridon* Poda occurred on every patch of moisture available to them. Even animal faeces were covered with these butterflies.

On the slopes above the forest line *Aporia crataegi* L. occurred every year in their thousands together with several species of Zygaenidae. These included *Zygaena purpuralis* Brunn., *Z. scabiosae* Esp., *Z. loniceræ* Schev., *Z. transalpina* Esp., *Z. filipendulae* L., *Z. carniolica* Scop., *Z. lavandulae* Esp., and *Z. trifolii* Esp.

Many species of fritillary also abounded here including *Mesoacidalia aglaja* L., *Fabriciana adippe* Schiff. and *Argynnis paphia* L. which could all be found feeding on clumps of the Red Valerian *Centranthus ruber* L. and Rosebay Willowherb *Epilobium angustifolium* L. Lower down the mountain they fed at flowers of blackberry and some of the larger thistles. *Brenthis daphne* Schiff. was also common at lower altitudes.

Three species of swallowtail occurred on the mountain. *Iphiclides podalirius* L., *Papilio machaon* L., and *P. alexanor* Esp. The last named was uncommon but the two former species were very common, especially *podalirius*, larvae of which could be found feeding on apricot and apple foliage in the cultivated areas of the Carpentras plain.

A large proportion of *Melanargia galathea* L. occurring on Ventoux were of the very dark form *procida* Herbst. In 1970 more than 50% of specimens taken above 4000 ft. were of this form. On the plain and lower slopes the normal form occurred.

Only twice have I recorded *Melanargia occitanica* Esp. Both occasions were in 1968. and perhaps by coincidence the two localities were both next to old chateaux: those of Chateauneuf-du-Pape and Le Barroux, the former being slightly outside the area under consideration but of sufficient interest to mention here. Although I searched thoroughly during 1969 and 1970, I failed to find a single specimen of this species.

From Malaucene a small road through Beaumont-de-Ventoux and Les Valettes brings one to a small valley situated at the northern side of the mountain. In this valley runs a stream bordered by large willow trees. Here I was surprised to find a colony of *Vanessa antiopa* L., a species usually uncommon in this area of Provence (Dufay 1965-1966). Again many species of fritillary were found including *Clossiana dia* L., and *Euphydryas aurinia provincialis* Bsd. *Zerinthia rumina australis* Esp. could also be taken on the wooded slopes. In May, some of the fields bordering the stream were filled with the flowers of wild narcissus and other meadow plants. Many Lycaenids and Hesperids were present, also the hawkmoths *Haemorrhagia tityus* Poda., *H. fuciformis* L. and *Macroglossum stellatarum* L.

Only a few yards from our house at Gigondas were the ruins of an old chateau. In the summer these ruins were floodlit every night and at weekends only during the remainder of the year. Two of the lamps were of the mercury vapour type and these provided convenient moth traps. I kept the grass trimmed around them and laid cotton sheets for easier capture of moths. As well as myself there was another who was also very keen on catching moths. He was an extremely large

toad, the largest I have ever seen. He arrived each night without fail to feed on the hundreds of insects attracted to the light. Perhaps the regular supply of unlimited food without any effort involved in its capture accounted for his large size.

Also present at the lamps were several praying mantids *Empusa pennata* Thun. These were several inches long, very narrow and possessed feathery antennae (♂). The mantids also gorged themselves each night on the abundance of insects. Perhaps they too were originally attracted to the lamps as were their prey. *Mantis religiosa* L. was also occasionally seen.

I will never forget the first occasion my wife and I saw the Giant Emperor Moth *Saturnia pyri* Schiff. Two of these moths were flying around a street lamp in Gigondas. They were so large that at first we thought that they were bats, but we realised their identity after stopping the car. They were too high to observe properly but the following morning, much to my wife's alarm and to my surprise, a large female *pyri* was resting on one of my shirts which had been left hanging on the washing line overnight.

Mont Ventoux and the Carpentras area are famous in the entomologist world because J. H. Fabre, the French entomologist, taught biology at the Carpentras High School. The modern lycée is named after him and not far away in the village of Serignan, his house and garden where he wrote his "Souvenirs Entomologiques," are open to the public. The insect collection on show leaves much to be desired and is greatly lacking in Lepidoptera, but a visit is well worthwhile. Fabre was very familiar with Mont Ventoux and its insects. In fact it is sometimes called "Fabre's Mountain".

Little has changed in the way of life in the small villages since Fabre's time. In the heat of the day, most of the villagers take a siesta after lunch. At this time I usually set out in a straw hat and shorts, armed with a net and camera. Cicadas sang incessantly in the trees. Large black Xylocopid bees buzzed from flower to flower together with large black and yellow Scoliid wasps. Hornets too, were frequently seen. These often nest in the small stone cabins dotted among the vineyards and farms.

On some afternoons when the sun blazed down, even the butterflies had to take shelter from its heat, and it was best to return to the coolness of the house or a deckchair in the shade, to write up notes. Even here the insect life was active. House flies attracted by a donkey which lived in a neighbour's cellar were numerous and very annoying when one dozed for five minutes. Bright metallic green chafers, *Cetonia aurata* L. flew to the vase of flowers on the windowledge. Small black scorpions could be found curled up under this vase every morning even though they were always ejected out of the window when found. On the garden wall, large green lizards skuttled from stone to stone.

In the early evening, swallows chased each other in circles

around the house until darkness came. Their place was then taken by bats who also seemed to enjoy their powers of flight. The incessant noise of the cicadas during the daytime was replaced by that of frogs, and glowworms lit up the garden walls.

Provence has a wonderfully unique atmosphere. The food, the wine, the history, and last but not least the insects and wild life, make this area of France more than attractive to me. One can live a peaceful tranquil existence away from the hustle and bustle of modern life and in a most pleasant climate. I look forward to returning to the area in 1972 and adding to my list of species and knowledge of Fabre's Mountain.

The following 117 butterfly species were taken during 1968-1971 on and around Mont Ventoux. The list does not constitute all butterfly species known to occur on the mountain.

PAPILIONIDAE

Papilio machaon L.
papilio alexanor Esp.

Iphiclides podalirius L.
Zerinthia rumina australis
Esp.
Parnassius apollo L.

PIERIDAE

Gonopteryx rhamni L.
Gonopteryx cleopatra europaea Vrtv.
Aporia crataegi L.
Colias australis Vrtv.
Colias crocea Geoff..
Colias hyale L.
Anthocaris belia euphenoides Stdgr.

Anthocaris cardamines L.
Euchloe ausonia crameri
Btl.
Pontia daplidice L..
Pieris napi L.
Pieris rapae L.
Pieris brassicae L.
Leptidea sinapis L.

LYCAENIDAE

Heodes tityrus tityrus Poda.
Heodes alciphron Rott.
Lycaena phlaeas L. f. *elea*
Fab.
Lampides boeticus L.
Everes argiades Pall.
Cupido minimus Fuess.
Celastrina argiolus L.
Philotes baton Berg.
Maculinea arion L.
Plebicula amanda Schn.
Plebicula dorylas Schiff.
Plebicula escheri Hueb.
Plebejus argus L.
Cyaniris semiargus Rott.
Polyomatus eros Ochs.
Polyomatus icarus Rott.

Lysandra coridon Poda
Lysandra amandus Sch.
Lysandra bellargus Rott.
Lysandra hispana H-Sch.
Agrodiaetus dolus dolus
Hb.
Agrodiatus damon Schiff.
Agrodiatus ripartii Frey.
Glaucopsyche alexis Poda.
Aricia allous Gey.
Callophrys rubi L.
Quercusia quercus L.
Nordmannia ilicis Esp.
Nordmannia acaciae Fab.
Nordmannia esculi Hb.
Strymonidia spini Schiff.

NYMPHALIDAE

Limenitis reducta Stdg.
Euphydryas aurinia provincialis Bsd.
Melitaea didyma meridionalis Stdg.
Melitaea cinxia L.
Melitaea diamina Lang.
Mellicta deione Gey.
Mellicta parthenoides Kef.
Mellicta athalia Rott.
Clossiana euphrosyne L.
Clossiana dia L.
Brenthis ino Rott.
Brenthis daphne Schiff.

Fabriciana adippe Schiff.
 + *f. cleodoxa* Och.
Mesoacidalia aglaja aglaja L.
Argynnis paphia paphia L.
Fabriciana niobe L.
 + *f. eris* Meig.
Issoria lathonia L.
Vanessa cardui L.
Vanessa atalanta L.
Polygonia egea Cr.
Polygonia c-album L.
Nymphalis antiopa L.
Nymphalis polychloros polychloros L.
Aglais urticae L.

SATYRIDAE

Pararge aegeria aegeria L.
Lasiomatta megaera megaera L.
Lasiomatta maera L. f.
adrasta Illig.
Lasiomatta petropolitana Fab.
Melanargia russiae cleanthe Bsd.
Melanargia galathea galathea L. + *f. procida*
Melanargia occitanica Esp.
Coenonympha arcania darwiniana Stdg.
Coenonympha dorus Esp.
Coenonympha pamphilus L.
Maniola jurtina hispulla Esp.
Pyronia bathseba pardilloi Sag.
Pyronia tithonus L.

Pyronia cecilia Vall.
Hyponephele lycaon Kuhn.
Satyrus ferula Fab.
Satyrus actaea Esp.
Brintesia circe Fab.
Minois dryas Scop.
Arethusana arethusa dentata Stdg.
Hipparchia fagi Scop.
Erebia meolans de Prunn.
Hipparchia alcyone Schiff.
Hipparchia statilinus Hufn.
Hipparchia semele cadmus Frhst.
Erebia ligea ligea L.
Erebia triaria de Prunn.
Erebia epistygne Hb.
Erebia scipio Bsd.
Erebia montana de Prunn.
Erebia neoridas Bsd.

HESPERIIDAE

Pyrgus fritillarius Poda.
Pyrgus foulquieri Obt.
Pyrgus malvae malvoides E. & E.
Erynnis tages L.
Gegenes pumilio Hoff.
Carcharodus lavatherae Esp.

Carcharodus alceae Esp.
Ochlodes venatus faunus Turati
Thymelicus sylvestris Poda.
Thymelicus acteon Rott.
Spialia sertorius Hoff.

NEMEOBIIDAE

Hamaeris lucina L.

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Notes on the Microlepidoptera

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THE BURREN PLUMES

I have read with much interest Mr Sadler's account in the January and February issues of his party's Burren trip and of their lack of success with *Platyptilia tesseradactyla* Treits. nec L. and *Aciptilia icterodactyla* Mann s/sp. *phillipsi* Huggins. Mr Sadler suggests that they were too early, from 20th May onwards, and this is certainly true as regards *icterodactyla*.

As regards *tesseradactyla*, the trouble was almost certainly the weather. The earliest Burren specimen in my series was taken on 29th May 1956, and I have seen it earlier. I have known this moth for well over fifty years, and except by one method, always found it rather difficult to get except on a calm warm afternoon, which is a rarity in the Burren in the last week of May and the first two in June. On such a day, and also in the early evening, it may be disturbed or occasionally seen flitting or seated on the flowers of the *Antennaria*. It is also in the habit, like many of its genus, of sitting on the flower-heads after dark, when it may be found with a torch.

P. ochrodactyla Hübn. has this same habit: there was, some forty years ago, a lot of tansy clumps on the Ludham road at the back of the old Ferry Hotel at Horning (destroyed by a bomb in the last war). I often stirred these up hoping for *ochrodactyla* without result, but one night in July 1923 I went there with a torch after dinner, about 10 p.m. and almost every flower-head had an *ochrodactyla*, the males just sitting there and the females with their ovipositors thrust deep into a flower. I expect road improvements have done away with all the tansy today.

Tesseradactyla is, or was, commoner locally in the Cookstown district of Tyrone, on the eskers than in the Burren, though at the moment I should not recommend anyone to look for it there, in Miss Devlin's constituency!

In 1938 my late friend Tom Greer took me to its locality near Lissane, on 8th June, the weather being dull, cold and miserable, we saw none. I suggested we should try again on the 9th which was even more wretched, and took my bee-smoker with me. We stirred the vegetation and saw nothing; I then got the smoker going under Greer's pitying eye, and fetched out at least 30 in an hour.